

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appellant(s) :	Bruce H. HANSON et al.	Group Art Unit:	3653
Appln. No. :	10/630,940	Examiner:	Mark Hageman
Filed :	July 31, 2003	Confirmation No.:	1862
For :	SEQUENCING SYSTEM AND METHOD OF USE		

**APPEAL BRIEF UNDER 37 C.F.R. §41.37**

Commissioner for Patents  
United States Patent and Trademark Office  
Customer Service Window, Mail Stop Appeal Brief-Patents  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir:

This appeal is from the Examiner's rejection of claims 1-23 as set forth in the Final Office Action dated January 19, 2007. A Notice of Appeal and the associated fee under 37 C.F.R. §41.20(b)(1) were submitted on April 11, 2007. Accordingly, this Appeal Brief is being timely submitted by the initial due date of June 11, 2007. Payment of the requisite fee under 37 C.F.R. §41.20(b)(2) is submitted herewith. No additional fee is believed to be required for filing the instant Appeal Brief. However, if for any reason the necessary fee is not associated with this file, the undersigned authorizes the charging of any filing fees for the Appeal Brief and/or any necessary extension of time fees to Deposit Account No. 19 - 0089.

**(I) REAL PARTY IN INTEREST**

The real party in interest is Lockheed Martin Corporation, assignee of the entire interest in the above-identified application by an assignment recorded in the U.S. Patent and Trademark Office on July 31, 2003, at Reel 014356 and Frame 0305.

**(II) RELATED APPEALS AND INTERFERENCES**

The Appellants, their legal representatives and the Assignee are not currently aware of any appeals, interferences, or judicial proceedings that may directly affect or be directly affected by or have some bearing on the Board's decision in this appeal. Attached hereto is a Related Proceedings Appendix showing no related appeals or interferences.

**(III) STATUS OF THE CLAIMS**

In the Final Office Action dated January 19, 2007, claims 1-23 are pending and rejected. Claims 1-23 are being appealed and are listed in the "Claims Appendix" attached herewith.

**(IV) STATUS OF THE AMENDMENTS**

No amendments to the claims have been filed subsequent to the Final Office Action dated January 19, 2007. Claims 1-23 are currently pending.

**(V) SUMMARY OF THE CLAIMED SUBJECT MATTER**

**Independent Claim 1**

By way of non-limiting example, the invention provides for a system for sequencing products. A plurality of input feeding devices 102a, 102b, 102c, 102d each randomly receives

product from a stream of product “PS” (FIG. 1; lines 8-9 and 22-23 of page 7). A plurality of output groups 106a, 106b, 106c, 106d each has a plurality of output bins 106 (FIG. 1; lines 1-5 of page 8).

A control system “C” has a mode which constrains the input feeding devices to: feeding non-rejected product to output bins of assigned output groups of the plurality of output groups associated with a corresponding one of the plurality of input feeding devices (FIG. 3; lines 5-24 of page 9); and feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders (FIG. 3, lines 1-8 of page 10).

### **Independent Claim 15**

By way of non-limiting example, the invention provides for a method of sequencing product. The method includes providing a plurality of product from a stream of product to any of a plurality of input devices (step 400; FIG. 4; lines 19-24 of page 12). The method also includes feeding, in a first pass phase, each product of the plurality of product to output bins based on a code associated with each product of the plurality of product (step 404; FIG. 4; lines 24-27 of page 12). Additionally, the method includes assigning each input device of the plurality of input devices to a specific output group of the plurality of output groups for a second pass phase (step 406; FIG. 4; lines 6-12 of page 13). The method further includes feeding, in the second pass phase, non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each input device which is feeding the non-rejected product (steps 408 and 414; FIG. 4; lines 12-14 of page 13; lines 17-20 of page 14). Lastly, the method includes feeding, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the input devices (step 412; FIG. 4; lines 4-11 of page 14).

**Independent Claim 21**

By way of non-limiting example, the invention provides for a system for sequencing product. The system comprises means for providing a plurality of product from a stream of product. The structure, material, or acts that correspond to this means plus function recitation includes product stream “PS” and inserters “I” described in the specification at least at lines 22-24 of page 7.

The system further comprises means for feeding each product of the plurality of product to output bins based on a code in a first pass phase and second pass phase. The structure, material, or acts that correspond to this means plus function recitation includes the input feeding devices 102a, 102b, 102c, 102d and transporting system 104 described in the specification at least at lines 5-27 of page 7.

The system also includes means for assigning each feeding means to a specific output group of the plurality of output groups for the second pass phase. The structure, material, or acts that correspond to this means plus function recitation includes the controller “C” described in the specification at least at lines 24-27 of page 7, lines 1-5 of page 8, and lines 5-7 of page 9.

The system additionally comprises means for constraining, in the second pass phase, non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each feeding means which is feeding the non-rejected product. The structure, material, or acts that correspond to this means plus function recitation includes the controller “C” described in the specification at least at lines 24-27 of page 7, lines 5-24 of page 9, lines 20-22 of page 12, and line 27 of page 12 through line 2 of page 13.

Lastly, the system comprises means for permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding

means. The structure, material, or acts that correspond to this means plus function recitation includes the controller “C” described in the specification at least at lines 24-27 of page 7, lines 1-8 of page 10, lines 20-22 of page 12, and line 27 of page 12 through line 2 of page 13.

**(VI) GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

(A) Claims 1-23 are rejected under 35 U.S.C. §103(a) for being unpatentable over U.S. Patent No. 6,107,588 issued to De Leo et al. in view of U.S. Publication No. 2002/0104782 to DeWitt.

(B) Claims 1-23 were rejected under 35 U.S.C. §103(a) for being unpatentable over U.S. Patent No. 6,274,836 issued to Walach in view of U.S. Publication No. 2002/0104782 to DeWitt.

**(VII) ARGUMENTS**

**(A) Claims 1-23 rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,107,588 issued to De Leo et al. (“De Leo”) in view of U.S. Publication No. 2002/0104782 to DeWitt (“DeWitt”).**

*Claims 1, 3, 4, 7, and 9-14 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt*

The rejection of claims 1, 3, 4, 7, and 9-14 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. To establish a *prima facie* case of obviousness,

three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §2142. Appellants submit that no proper combination of De Leo and DeWitt teaches or suggests each and every feature of the claimed invention.

The instant invention generally relates to a sequencing system that can be used, for example, for sequencing mail pieces into an order for delivery. As discussed in the Background section of the instant invention, sequencing systems *per se* are known. However, in implementations of the present invention, mail pieces are provided in random order to the postal service or other mail handling facility. The mail pieces are inducted through one or more input feeders that capture information (e.g., delivery address) via bar code readers, optical character recognition, etc. A transport system moves each mail piece, in a first or second pass, to a grouping of output bins based upon the captured information. Each grouping of output bins has a respective reject bin for receiving rejected mail pieces (e.g., mail pieces in which delivery information is misread or not read, mail pieces that are fed into an improper feeding device, etc.). Appellants have found that providing a reject bin in each grouping of output bins decreases the sorting/sequencing capacity of known systems.

Accordingly, by way of non-limiting example, implementations of the invention provide that, during a second pass sort, each of a plurality of input feeding devices feeds non-rejected

product (e.g., mail pieces) to output bins of a respective assigned output group, while rejected product from any of the input feeding devices may be fed to a common (e.g., accessible by all input feeding devices) reject bin of a single output group. More specifically, independent claim 1 recites, in pertinent part:

... a control system having a mode which constrains the input feeding devices to (i) feeding non-rejected product to output bins of assigned output groups of the plurality of output groups associated with a corresponding one of the plurality of input feeding devices, and (ii) feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders.

The applied references do not teach or suggest these features.

The Examiner asserts that De Leo discloses the features of claim 1 except that De Leo fails to explicitly disclose “feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders”. Appellants agree that De Leo does not show any of these features, amongst other features of the claimed invention.

The Examiner, however, is of the opinion that DeWitt shows “feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to any one of the plurality of input feeders (460) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105)” (Final Office Action, page 2). The Examiner asserts that it would have been obvious to modify De Leo by utilizing the reject bin of DeWitt to thus achieve the claimed invention. Appellants acknowledge that DeWitt shows a reject bin; however, Appellants respectfully disagree with the remaining portions of the Examiner’s argument.

De Leo shows a two pass system for sorting postal objects (e.g., mail pieces) to be delivered. In a first pass, a stream  $F_i$  of randomly ordered postal objects 7 is fed to first and second input devices A, B (Fig. 1a; col. 2, lines 25-49). Based upon a portion of a code associated with each object 7, a controller 22 directs the objects to any one of a plurality of output bins  $U_i$ . After the first pass, a container 20 is removed from each bin  $U_i$  in a specified order to create collections  $C_a$  and  $C_b$  (Fig. 1a; col. 4, lines 30-67). Subsequently, new, empty containers 20 are fitted into each bin  $U_i$ . In the second pass, each of the feeders is constrained to a set of containers, e.g., subsets  $W_a$  and  $W_b$ ; that is, in DeLeo, the input feeders, in the second pass, only feed product to its respective subset. Thus, in DeLeo, the separate feeders are not configured to feed product outside of its subset. More specifically, in the second pass, the postal objects of collection  $C_a$  are fed to first input device A, and are directed towards a first subset  $W_a$  of output bins (Fig. 1b; col. 5, lines 10-31). Similarly, the postal objects of collection  $C_b$  are fed to second input device B, and are directed towards a second subset  $W_b$  of output bins. In this manner, the postal objects are sequenced into a delivery order depicted in FIG. 3. However, De Leo's constraint of input A to group  $W_a$  and input B to group  $W_b$  teaches away from the claimed invention, as discussed in more detail below.

The Examiner is of the opinion that DeWitt shows the use of reject bins and, in particular, "feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to any of the plurality of input feeders (460)". Although Appellants agree that DeWitt shows the use of a reject bin 250, it is clear that DeWitt does not teach (as with De Leo) that any of a plurality of feeding devices can feed rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders.



DeWitt shows an apparatus for acquiring image data from received mail pieces. The apparatus is used for opening envelopes and imaging documents (e.g., remittance transactions in the form of an invoice and an accompanying check) contained in the envelopes. In a first embodiment described with respect to FIGS. 1-18, a plurality of envelopes are fed to: an input feeder 15 that serially arranges the envelopes on a transport 75; a cutter 30 for cutting open the edges of the envelope; an extractor 50 for separating the envelope from the documents contained therein; a singulator 110 for placing the documents in single file on the transport 75; an imaging section 200 for acquiring data from the documents on the transport 75; and a stacker 300 that sorts the documents into a series of bins 302a-302h (paragraphs [0047] – [0049]).

At various points throughout the above-noted system, documents may be directed to a reject bin 250 for various reasons (e.g., improper order, too thick, etc.). However, in this first embodiment, DeWitt discloses only a single input feeder 15 that has access to the series of bins 302a-302h and the reject bin 250. The DeWitt disclosure makes no mention, whatsoever, that more than one feeder has access to a common reject bin. To the contrary, Appellants submit that DeWitt only discloses a single feeder 15, and that due to the modular configuration of DeWitt, the feeder only can access a reject bin within that modular configuration. There simply is no disclosure that the reject bin 250 is accessible by many different feeders, a proposition that would not seem possible in the DeWitt modular configuration. Therefore, De Witt does not teach or suggest feeding rejected product to at least one output bin ... accessible to any of the plurality of input feeders, as recited in claim 1.

Also, the Examiner refers to paragraph [0105] of DeWitt to show the missing features of the claimed invention. However, paragraph [0105] simply mentions:

Alternatively, if the MICR line or OCR line is not fully read for a document, the document along with the other documents in the same transaction may be directed to a reject bin. If documents are directed to a reject bin, then the image computer 260 discards the image data for the documents in the transaction.

There is no disclosure, whatsoever, that the reject bin is accessible by many different feeders, assigned to different groups of output bins. As argued above, DeWitt does not have the ability, due to its modular configuration, to have more than one feeding device accessing a common reject bin.

In this rejection, the Examiner is also of the opinion that DeWitt shows a plurality of feeding devices at reference numeral 460 for the purpose of separating items which have been misread or partially read from those that have been properly processed. Appellants submit that DeWitt only shows one feeding device at reference numeral 15. Reference numeral 460, on the other hand, refers to one or more drop slots or chutes (see, paragraph 0159). The drop chutes 460 are not input feeding devices as described in the instant specification and as understood by those of ordinary skill in the art.

Appellants acknowledge that, during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. MPEP §2111. However, Appellants submit that the Examiner's interpretation of the term "input feeding devices" as it relates to De Witt's chutes is not consistent with the specification of the present application or the interpretation which would be given by one of ordinary skill in the art. More specifically, the input feeding devices of the present invention are described, in an exemplary embodiment, as devices having a feed rate capacity of approximately 10,000 letters per hour, optionally including a pause device as well as an inserter and optical reader, and being controlled by a controller (specification, page 7, lines 5-19). Contrary to this, De Witt's chutes 460 are

arranged for a human operator to place documents in as the documents are serially received from an extractor 450. Thus, the chutes 460 are for receiving documents, one at a time, from the hand of a human operator. As such, Appellants respectfully submit that the chutes 460 are not input feeding devices as recited and described in the present invention or as is understood by those of ordinary skill in the art.

Moreover, reference numeral 460 refers to input chutes that are described by DeWitt with respect to a second embodiment of the invention that is mutually exclusive of the first embodiment. That is, chutes 460 are disclosed as part of an alternative embodiment shown in FIGS. 19-22 and described in paragraphs [0157] through [0192]. Even assuming *arguendo* that the chutes 460 may constitute input feeding devices, which Appellants do not concede, there is no mention whatsoever of a common reject bin accessible by all the chutes 460 in the second embodiment. In fact, DeWitt does not mention or show any reject bin with respect to the second embodiment. As such, that there is no disclosure that chutes 460 have access to any reject bin, much less to a reject bin that is accessible to all of the chutes 460. Moreover, De Witt makes no mention whatsoever that the features of the two separate embodiments may be used together. Therefore, by relying on reject bin 250 (of the first embodiment) and chutes 460 (of the second embodiment), the Examiner is improperly mixing and matching elements of different and distinct embodiments of DeWitt in an effort to arrive at the claimed invention.

Furthermore, Appellants submit that De Leo appears to teach away from the claimed invention. De Leo explicitly states that postal objects from input A can only be directed toward the bins of output group  $W_a$ , and postal objects from input B can only be directed toward the bins of output group  $W_b$ . More specifically, De Leo De Leo explicitly teaches that, in the second pass phase:

... according to the operations governed by this block, the electronic unit 22 commands a mode of operation of the sorter device 17 according to which each postal object 7 supplied to the first input A (FIG. 1b) can only be directed towards a first subset  $W_a$  of the  $N$  outputs. Parallel to this a postal object supplied to the second input B (FIG. 1b) is directed towards a second subset  $W_b$  of the  $N$  outputs of the machine, with the subset  $W_b$  not having elements common to the subset  $W_a$ . In other words, the sorter device 17, under the control of the electronic unit 22, operates according to a "separate" conveying mode according to which each postal object 7 supplied to the input A can be directed only towards the outputs of the subset  $W_a$  and each postal object 7 supplied to the input B can be directed only towards the outputs of the subset  $W_b$ . From this it follows that each of the  $N$  outputs cannot receive objects coming from both the input A and the input B.

[col. 5, lines 13-26, emphasis added]

That is, De Leo requires that, during the second pass phase, postal objects from input A can only be directed toward the bins of output group  $W_a$ , and postal objects from input B can only be directed toward the bins of output group  $W_b$  (col. 5, lines 15-26). Thus, even if one were to add reject bins to De Leo as suggested by the Examiner, the combination of the applied references would result in separate feeding devices having access to their own reject bin (i.e., a reject bin in each output group), which is not a common reject bin to all of the feeding devices. Therefore, De Leo teaches directly away from an output bin in a single output group that is accessible to any of the plurality of input feeders.

Moreover, as discussed in the Background section of the instant invention, Appellants are aware of the use of rejection bins *per se*. Reject output bins are normally provided in each output group to ensure faster sequencing of the non-rejected mail pieces. If anything, this combination of references would result in exactly what is already known: separate feeding devices having access to their own reject bin, which is not common to all of the feeding devices. Appellants maintain that prior to the invention, it was not known to constrain, in a second pass,

each of a plurality of input feeders to a respective output group and to feed rejected products to at least one output bin of a plurality of output bins in a single group accessible to any of the plurality of input feeders. Appellants' inventive use of one or more reject bins in a single group that is accessible to all of the input feeders overcomes the problem of decreased capacity that is present when each group has its own reject bin(s).

Because the applied references (i) do not teach or suggest all of the claimed features, and (ii) teach away from the claimed invention, Appellants further assert that the only reasonable rationale for modifying De Leo in the manner suggested by the Examiner is found in reviewing Appellants' own disclosure, which is a use of impermissible hindsight that renders the rejection improper.

For all of the above-discussed reasons, Appellants submit that no proper combination of De Leo and DeWitt teaches or suggests each and every feature of claim 1. Claims 3, 4, 7, and 9-14 depend from claim 1 and are allowable for the reasons discussed above with respect to claim 1. Therefore, the rejection under 35 U.S.C. §103 of claims 1, 3, 4, 7, and 9-14 should be withdrawn.

*Claim 2 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt*

The rejection of claim 2 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 2 depends from allowable independent claim 1, and additionally recites that the plurality of input feeding devices directs the rejected product from the stream of product to the at least one output bin in the single group based on at least one of misreading or non-reading of a code associated with the rejected product and an operator or machine error.

No proper combination of De Leo and DeWitt discloses or suggests this combination of features. As discussed above with respect to claim 1, neither De Leo nor DeWitt discloses that a plurality of input feeding devices directs rejected product to an output bin of a single group. Therefore, De Leo and DeWitt cannot arguably suggest a plurality of input feeding devices directs rejected product to an output bin of a single group *based upon* misreading or nonreading of a code, or operator or machine error. Therefore, the applied references fail to disclose or suggest each and every feature of claim 2, and, therefore, fail to render the claimed invention obvious.

*Claim 5 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt*

The rejection of claim 5 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 5 depends from allowable independent claim 1, and additionally recites that the single reject output bin increases a capacity of processing points for sequencing the product during a second pass phase in the plurality of output groups.

The Examiner acknowledges that neither De Leo nor DeWitt discloses this feature, but asserts that this would be inherent in the modified system of De Leo because “a reject bin inherently increases the capacity of the apparatus, as undeliverable mail is removed from the system, thus freeing up capacity” (Final Office Action, page 4). Appellants respectfully traverse the Examiner’s assertion of inherency. MPEP §2112 provides the following guidance regarding rejections based upon inherency:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because

inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

...

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)

Appellants respectfully submit that the Examiner's proffered reasoning that "a reject bin inherently increases the capacity of the apparatus, as undeliverable mail is removed from the system, thus freeing up capacity" is mere speculation of possibilities provided in an attempt to arrive at the claimed invention. In fact, Appellants submit that converting one of De Leo's bins (e.g., U<sub>1</sub>) in each group to a reject bin would actually *decrease* capacity by taking away a possible delivery point. Because the Examiner's use of inherency is improper, the rejection of claim 5 is improper and should be withdrawn.

*Claim 6 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt*

The rejection of claim 6 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 6 depends from allowable independent claim 1, and additionally recites that the single reject output bin is provided in a separate output group from the assigned output groups.

Neither De Leo nor DeWitt discloses this feature. First, De Leo does not show any output groups separate from the assigned output groups Wa and Wb. Second, De Leo does not show a reject bin associated with any output group. Third, De Leo teaches that each input device is restricted to an associated output group, and therefore any single input device could not direct product to a separate group outside of its associated group. DeWitt does not disclose assigned output groups, and, therefore, cannot arguably suggest an output group separate from assigned output groups. Therefore, the applied references fail to disclose or suggest each and every feature of claim 6, and, therefore, fail to render the claimed invention obvious.

*Claim 8 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt*

The rejection of claim 8 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 8 depends from allowable independent claim 1, and additionally recites that the control system constrains each input feeding device to the at least one output bin for feeding the rejected product during the second pass phase.

Neither De Leo nor DeWitt discloses this feature. That is, neither reference discloses that a control system *constrains* input feeding devices to a *reject bin*. Besides De Leo's constraint of input A to group Wa and input B to group Wb in the second pass phase, there is no other mention of constraining input devices to anything, much less to a common reject bin accessible by all of the inputs. Therefore, the applied references fail to disclose or suggest each and every feature of claim 8, and, therefore, fail to render the claimed invention obvious.



Claims 15, 16, 18, and 20 rejected under 35 U.S.C. §103(a) in view of De  
Leo and DeWitt

The rejection of claims 15, 16, 18, and 20 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Independent claim 15 recites *inter alia* feeding, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the input devices. Appellants submit that no proper combination of the applied art teaches or suggests this feature.

The Examiner acknowledges that De Leo does not disclose this feature. The Examiner asserts that “DeWitt discloses feeding rejected product of the plurality of product to an output bin (250) common and accessible to any of the input devices (260 and para 105)”, that it would have been obvious to modify De Leo based upon the teaching of DeWitt, and that the resultant combination contains all of the features of the claimed invention (Final Office Action, page 6). Appellants respectfully disagree.

Appellants note that the Examiner is of the opinion that element 260 of DeWitt constitutes input devices (Final Office Action, page 6). However, DeWitt discloses that element 260 is an imaging computer (paragraph [0076]). Appellants respectfully submit that an imaging computer is not an input feeding device, and that adding an imaging computer to De Leo would not result in the claimed invention.

In any event, as discussed above with respect to claim 1, Appellants submit that DeWitt does not show an output bin that is common and accessible to any of a plurality of input devices. For example, in a first embodiment, DeWitt shows a single input feeding device 15 that has access to a single reject bin 250. DeWitt does not, however, disclose plural input feeding devices, and, therefore, cannot arguably disclose an output bin that is common and accessible to

any of a plurality of input devices. In a second embodiment, DeWitt shows a plurality of chutes 460 and a plurality of output bins 490. However, the chutes 460 do not constitute input feeding devices. Moreover, DeWitt makes no mention of handling rejected product in the second embodiment. Furthermore, DeWitt makes no indication that elements of the first and second embodiments can be combined. Therefore, DeWitt does not disclose feeding rejected product of the plurality of product to an output bin common and accessible to any of the input devices, as recited in claim 15.

Moreover, as also discussed above with respect to claim 1, Appellants submit that De Leo teaches directly away from an output bin in a single output group that is accessible to any of the plurality of input feeders. Thus, the combination of the applied references would result in separate feeding devices having access to their own reject bin, which is not a common reject bin to all of the feeding devices.

Because the applied references (i) do not teach or suggest all of the claimed features, and (ii) teach away from the claimed invention, Appellants further assert that the only reasonable rationale for modifying De Leo in the manner suggested by the Examiner is found in reviewing Appellants' own disclosure, which is a use of impermissible hindsight that renders the rejection improper.

For all of the above-discussed reasons, Appellants submit that no proper combination of De Leo and DeWitt teaches or suggests each and every feature of claim 15. Claims 16, 18, and 20 depend from claim 15 and are allowable for the reasons discussed above with respect to claim 15. Therefore, the rejection under 35 U.S.C. §103 of claims 15, 16, 18, and 20 should be withdrawn.

Claim 17 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt

The rejection of claim 17 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 17 depends from allowable independent claim 15, and additionally recites that the rejected products are fed by each input device of the plurality of input devices to the commonly accessible output bin.

Neither De Leo nor DeWitt discloses this feature. De Leo does not disclose a commonly accessible output bin in the second pass phase. De Witt does not disclose a plurality of input devices that feed product to a commonly accessible output bin. Therefore, the applied references fail to disclose or suggest each and every feature of claim 17, and, therefore, fail to render the claimed invention obvious.

Claim 19 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt

The rejection of claim 19 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 19 depends from allowable independent claim 15, and additionally recites that the commonly accessible output bin is one of the output bins of the specific output group and the any of the input devices are all of the input device.

Neither De Leo nor DeWitt discloses this feature. De Leo does not disclose a reject bin. The DeWitt reject bin 250 is disposed in the image processing section 200 (FIG. 14). However, the only other bins 302a-302h are disposed in a different physical location in the stacker 300 (FIG. 18). There is no description that the reject bin 250 is part of a grouping of bins 302a-302h.

To the contrary, the reject bin 250 appears to be completely unassociated with and separate from the grouping of bins 302a-302h. Therefore, the reject bin 250 does not constitute a commonly accessible output bin that is one of the output bins of the specific output group, as recited in claim 19. Therefore, the applied references fail to disclose or suggest each and every feature of claim 19, and, therefore, fail to render the claimed invention obvious.

*Claims 21-23 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt*

The rejection of claims 21-23 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Independent claim 21 recites *inter alia* means for permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means. Appellants submit that no proper combination of the applied art teaches or suggests this feature.

The Examiner acknowledges that De Leo does not disclose this feature. The Examiner asserts that “DeWitt discloses means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means (460 and para 105)”, that it would have been obvious to modify De Leo based upon the teaching of DeWitt, and that the resultant combination contains all of the features of the claimed invention (Final Office Action, page 9). Appellants respectfully disagree.

Appellants respectfully submit that elements of claim 21 invoke 35 U.S.C. §112, sixth paragraph, and that the rejection is inappropriate because it does not address the claim in accordance with MPEP §§2181 *et seq.* Specifically, the Examiner has failed to include in the Office Action a statement that the claim limitations are being treated under 35 U.S.C. §112, sixth

paragraph (MPEP §2181). Also, the Examiner has failed to provide an explanation or rationale in the Office Action as to why the prior art element is an equivalent to the claimed feature (MPEP §2183). Instead, the Examiner merely asserts that “DeWitt discloses means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means (460 and para 105)”. This assertion does not satisfy the Examiner’s initial burden of establishing equivalence. Therefore, the rejection is improper and should be withdrawn.

In any event, Appellants submit that the identified features of DeWitt do not perform the identical function<sup>1</sup> as the claimed invention, and therefore, cannot be an equivalent. That is, DeWitt does not disclose any structure, material, or act that functions to permit, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means, as recited in claim 21.

In fact, De Witt does not even disclose a second pass phase. Instead, DeWitt describes envelopes and contents of envelopes that are serially fed through a system. Because DeWitt does not disclose a second pass phase, DeWitt cannot reasonably be said to perform the claimed function of permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means.

Moreover, as discussed above with respect to claim 1, Appellants submit that DeWitt does not show an output bin that is common and accessible to any of a plurality of input devices. For example, in a first embodiment, DeWitt shows a single input feeding device 15 that has access to a single reject bin 250. DeWitt does not, however, disclose plural input feeding devices, and, therefore, cannot arguably disclose an output bin that is common and accessible to

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<sup>1</sup> MPEP §2182 mandates that “Both before and after *Donaldson*, the application of a prior art reference to a means or step plus function limitation requires that the prior art element perform the **identical function** specified in the claim.” [emphasis added]

any of a plurality of input devices. In a second embodiment, DeWitt shows a plurality of chutes 460 and a plurality of output bins 490. However, the chutes 460 do not constitute input feeding devices, and DeWitt makes no mention of handling rejected product in the second embodiment. Furthermore, DeWitt makes no indication that elements of the first and second embodiments can be combined. Therefore, DeWitt cannot arguably be said to perform the identical function recited in claim 21, namely, permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means. Therefore, the rejection is improper and should be withdrawn because the Examiner has failed to establish a *prima facie* case of equivalence.

Moreover, as also discussed above with respect to claim 1, Appellants submit that De Leo teaches directly away from an output bin in a single output group that is accessible to any of the plurality of input feeders. That is, De Leo explicitly teaches that, in the second pass phase:

... according to the operations governed by this block, the electronic unit 22 commands a mode of operation of the sorter device 17 according to which each postal object 7 supplied to the first input A (FIG. 1b) can only be directed towards a first subset Wa of the N outputs. Parallel to this a postal object supplied to the second input B (FIG. 1b) is directed towards a second subset Wb of the N outputs of the machine, with the subset Wb not having elements common to the subset Wa. In other words, the sorter device 17, under the control of the electronic unit 22, operates according to a "separate" conveying mode according to which each postal object 7 supplied to the input A can be directed only towards the outputs of the subset Wa and each postal object 7 supplied to the input B can be directed only towards the outputs of the subset Wb. From this it follows that each of the N outputs cannot receive objects coming from both the input A and the input B.

[col. 5, lines 13-26, emphasis added]

Thus, even if one were to add reject bins to De Leo as suggested by the Examiner, the electronic unit 22 of De Leo would still constrain the input device A to subset Wa, and the input device B

to subset Wb. As such, the combination of the applied references would result in separate feeding devices having access to their own reject bin, which is not a common reject bin to all of the feeding devices. Because De Leo's controller limits each respective input feeder to a respective assigned group in the second pass phase, De Leo's controller cannot operate in the same way as the controller of the present invention, which assigns each input feeder to an output group but also allows each input feeder to direct rejected product to a commonly accessible reject bin. Therefore, no proper combination of the applied references discloses or suggests a structure, material, or act that performs the claimed function in substantially the same way as the present invention to achieve substantially the same result.

Because the applied references (i) do not teach or suggest all of the claimed features, and (ii) teach away from the claimed invention, Appellants further assert that the only reasonable rationale for modifying De Leo in the manner suggested by the Examiner is found in reviewing Appellants' own disclosure, which is a use of impermissible hindsight that renders the rejection improper.

For all of the above-discussed reasons, Appellants submit that no proper combination of De Leo and DeWitt teaches or suggests each and every feature of claim 21. Claims 22 and 23 depend from claim 21 and are allowable for the reasons discussed above with respect to claim 21. Therefore, the rejection under 35 U.S.C. §103 of claims 21-23 should be withdrawn.

**(B) Claims 1-23 rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,274,836 issued to Walach (“Walach”) in view of U.S. Publication No. 2002/0104782 to DeWitt (“DeWitt”).**

**Claims 1, 3, 4, 7, 9, 10, and 12-14 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt**

The rejection of claims 1, 3, 4, 7, 9, 10, and 12-14 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 1 recites, *inter alia*,

a plurality of input feeding devices each randomly receiving product from a stream of product ...

... and (ii) feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders.

The applied references do not teach or suggest these features.

The Examiner asserts that Walach discloses the features of claim 1 except that Walach fails to explicitly disclose “feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders” (Final Office Action, page 10). Appellants agree that Walach does not show any of these features, amongst other features of the claimed invention.

Again, the Examiner is of the opinion that DeWitt shows the use of reject bins and, in particular, “feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to any of the plurality of input feeders (460)” (Final Office Action, page 10). Although Appellants agree that DeWitt shows the use of a reject bin, it is clear that there is no teaching in either of the references that any of the feeding devices can feed



rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders.

More specifically, Walach discloses a method and system for object sorting. The system comprises a multi-bin article sorter preferably comprising a plurality of P input bins and a plurality of N output bins (col. 5, lines 37-43). In a first pass, the articles are sorted into N output groups of articles being placed by the sorter in each of the N output bins. After the first pass, the N output groups are grouped into P input groups. The P input groups are resorted by placing each of the P input groups into a corresponding one of the P input bins. The sorter sorts the P input groups into N new output groups, each of the N new output groups being associated with and fed by one of the P input bins (col. 5, lines 47-63). Walach discloses that, before the first pass, the articles are divided approximately equally between the two input bins (col. 7, lines 8-9).

Contrary to the Examiner's assertions, Walach does not teach or suggest a plurality of input feeding devices each randomly receiving product from a stream of product. Walach does not disclose a stream of product. Instead, Walach describes input bins 10, which Appellants submit do not constitute a stream of product. Moreover, Walach does not disclose that the input bins 10 randomly receive products from anything, much less from a stream of product. Instead, Walach merely discloses input bins 10 and a sorter, and that the articles are divided approximately equally between the input bins. This does not, however, constitute randomly receiving products from a stream of product. In fact, this may even teach away from such inventive features of the claimed invention. Specifically, dividing the product equally amongst the feeders by definition cannot be random.

Moreover, Walach teaches away from the claimed invention since, during the second pass phase, the sorter is used to sort the P input groups into N new output groups, each of the N

new output groups being associated with and fed by exactly one of the P input bins (col. 5, lines 61-62). Thus, Walach teaches directly away from an output bin in a single output group that is accessible to any of the plurality of input feeders.

The Examiner, though, is of the opinion that DeWitt shows the use of reject bins and, in particular, “feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to any of the plurality of input feeders (460)” (Final Office Action, page 10). Although Appellants agree that DeWitt shows the use of a reject bin, it is clear that there simply is no teaching in either of the references that any of the feeding devices can feed rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders.

More specifically, DeWitt shows a reject bin which is accessible to only one feeder 15 which is designed to serially feed envelopes into the transport 75 (see, e.g., FIG. 1 and paragraph [0052]). The DeWitt disclosure makes no mention, whatsoever, that more than one feeder has access to the same reject bin. To the contrary, Appellants submit that DeWitt only discloses a single feeder 15, and that due to the modular configuration of DeWitt, the feeder only can access the single reject bin. More specifically, the single feeder 15 only has access to a single group of output bins, one of them being the reject bin. There simply is no disclosure that the reject bin is accessible from many different feeders, a proposition that would not seem possible in the DeWitt apparatus.

Also, the Examiner refers to paragraph 105 of DeWitt to show the missing features of the claimed invention. However, paragraph 105 simply mentions:

Alternatively, if the MICR line or OCR line is not fully read for a document, the document along with the other documents in the same transaction may be directed to a reject bin. If

documents are directed to a reject bin, then the image computer 260 discards the image data for the documents in the transaction.

There is no disclosure, whatsoever, that the reject bin is accessible by many different feeders, assigned to different groups. As argued above, DeWitt does not have the ability, due to its modular configuration, to have more than one feeding device accessing a common reject bin.

In these rejections, the Examiner is also of the opinion that DeWitt shows a plurality of feeding devices at reference numeral 460 for the purpose of separating items which have been misread or partially read from those that have been properly processed. Appellants submit that DeWitt only shows one feeding device at reference numeral 15. Reference numeral 460, on the other hand, refers to one or more drop slots or chutes (see, paragraph 0159). The drop chutes are not input feeding devices.

Appellants acknowledge that, during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. MPEP §2111. However, Appellants submit that the Examiner's interpretation of the term "input feeding devices" as it relates to De Witt's chutes is not consistent with the specification of the present application. More specifically, the input feeding devices of the present invention are described, in an exemplary embodiment, as devices having a feed rate capacity of approximately 10,000 letters per hour, optionally including a pause device as well as an inserter and optical reader, and being controlled by a controller (specification, page 7, lines 5-19). Contrary to this, De Witt's chutes 460 are arranged for a human operator to place documents in as the documents are serially received from an extractor 450. Thus, the chutes 460 are for receiving documents, one at a time, from the hand of a human operator. As such, Appellants respectfully submit that the chutes 460 are not input feeding devices as recited and described in the present invention.

Moreover, reference numeral 460 refers to input chutes that are described by DeWitt with respect to a second embodiment of the invention that is different from the first embodiment already described herein. That is, chutes 460 are disclosed and described with regard to an alternative embodiment shown in FIGS. 19-22 and described in paragraphs [0157] through [0192]. Even assuming *arguendo* that the chutes 460 may constitute input feeding device, which Appellants do not concede, there is no mention whatsoever of a common reject bin accessible by all the chutes 460. In fact, DeWitt does not mention or show any reject bin with respect to the second embodiment. As such, there is no disclosure that chutes 460 have access to any reject bin, much less to a reject bin that is accessible to all of the chutes 460. Therefore, by relying on reject bin 250 and chutes 460, the Examiner is improperly mixing and matching elements of different and distinct embodiments of DeWitt in an effort to arrive at the claimed invention.

Moreover, as discussed in the Background section of the instant invention, Appellants are aware of the use of reject bins *per se*. However, Appellants maintain that the combination of Walach and DeWitt would result in the known art, i.e., a system and method where in a second pass each of a plurality of input feeders have access only to their own reject bin, which is not common to all of the feeding devices.

Because the applied references (i) do not teach or suggest all of the claimed features, and (ii) teach away from the claimed invention, Appellants further assert that the only reasonable rationale for modifying Walach in the manner suggested by the Examiner is found in reviewing Appellants' own disclosure, which is a use of impermissible hindsight that renders the rejection improper.

For all of the above-discussed reasons, Appellants submit that no proper combination of Walach and DeWitt teaches or suggests each and every feature of claim 1. Claims 3, 4, 7, 9, 10,

and 12-14 depend from claim 1 and are allowable for the reasons discussed above with respect to claim 1. Therefore, the rejection under 35 U.S.C. §103 of claims 1, 3, 4, 7, 9, 10, and 12-14 should be withdrawn.

*Claim 2 rejected under 35 U.S.C. §103(a) in view of De Leo and DeWitt*

The rejection of claim 2 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 2 depends from allowable independent claim 1, and additionally recites that the plurality of input feeding devices directs the rejected product from the stream of product to the at least one output bin in the single group based on at least one of misreading or non-reading of a code associated with the rejected product and an operator or machine error.

No proper combination of Walach and DeWitt discloses or suggests this combination of features. As discussed above with respect to claim, neither Walach nor DeWitt discloses that a plurality of input feeding devices directs rejected product to an output bin of a single group. Therefore, Walach and DeWitt cannot arguably suggest a plurality of input feeding devices directs rejected product to an output bin of a single group *based upon* misreading or nonreading of a code, or operator or machine error. Therefore, the applied references fail to disclose or suggest each and every feature of claim 2, and, therefore, fail to render the claimed invention obvious.

*Claim 5 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt*

The rejection of claim 5 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 5 depends from allowable independent claim 1, and additionally recites that the single reject output bin increases a capacity of processing points for sequencing the product during a second pass phase in the plurality of output groups.

The Examiner acknowledges that neither Walach nor DeWitt discloses this feature, but asserts that this would be inherent in the modified system of Walach because “a reject bin inherently increases the capacity of the apparatus, as undeliverable mail is removed from the system, thus freeing up capacity” (Final Office Action, page 11). Again, Appellants respectfully traverse the Examiner’s assertion of inherency and submit that the Examiner’s proffered reasoning is mere speculation of possibilities. In fact, Appellants submit that converting one of Walach’s bins to a reject bin would actually *decrease* capacity by taking away a possible delivery point. Because the Examiner’s use of inherency is improper, the rejection of claim 5 is improper and should be withdrawn.

*Claim 6 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt*

The rejection of claim 6 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 6 depends from allowable independent claim 1, and additionally recites that the single reject output bin is provided in a separate output group from the assigned output groups.

Neither Walach nor DeWitt discloses this feature. First, Walach does not show any output groups separate from the assigned output group. Second, Walach does not show a reject bin associated with any output group. DeWitt does not disclose assigned output groups, and, therefore, cannot arguably suggest an output group separate from the assigned output groups.

Therefore, the applied references fail to disclose or suggest each and every feature of claim 6, and, therefore, fail to render the claimed invention obvious.

*Claim 8 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt*

The rejection of claim 8 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 8 depends from allowable independent claim 1, and additionally recites that the control system constrains each input feeding device to the at least one output bin for feeding the rejected product during the second pass phase.

Neither Walach nor DeWitt discloses this feature. That is, neither reference discloses that a control system *constrains* input feeding devices to a an output bin for rejected product. Besides Walach's constraint of inputs to groups in the second pass phase, there is no other mention of constraining input devices to anything, much less to a common reject bin accessible by all of the inputs. Therefore, the applied references fail to disclose or suggest each and every feature of claim 8, and, therefore, fail to render the claimed invention obvious.

*Claim 11 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt*

The rejection of claim 11 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 11 depends from allowable independent claim 1, and additionally recites that the plurality of input feeding devices is four input feeding devices and the plurality of output groups is equal to a number of the plurality of input feeding devices.

Neither Walach nor DeWitt discloses this feature. The Examiner apparently is of the opinion that Walach shows four input feeding devices. Appellants respectfully disagree and submit that Walach only discloses two input feeding devices. Therefore, the applied references fail to disclose or suggest each and every feature of claim 11, and, therefore, fail to render the claimed invention obvious.

Claims 15, 16, 18, and 20 rejected under 35 U.S.C. §103(a) in view of Walach  
and DeWitt

The rejection of claims 15, 16, 18, and 20 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 15 recites, *inter alia*,

providing a plurality of product from a stream of product to  
any of a plurality of input devices; ...  
... and feeding, in the second pass phase, rejected product  
of the plurality of product to an output bin common and accessible  
to any of the input devices.

Appellants submit that no proper combination of the applied art teaches or suggests these features.

The Examiner asserts that Walach discloses all of the features of claim 15 except for feeding, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the input devices. The Examiner further asserts that “DeWitt discloses feeding rejected product of the plurality of product to an output bin (250) common and accessible to any of the input devices (260 and para 105)”, that it would have been obvious to modify Walach based upon the teaching of DeWitt, and that the resultant combination contains



all of the features of the claimed invention (Final Office Action, page 14). Appellants respectfully disagree.

Appellants note that the Examiner is of the opinion that element 260 of DeWitt constitutes input devices (Final Office Action, page 14). However, DeWitt discloses that element 260 is an imaging computer (paragraph [0076]). Appellants respectfully submit that an imaging computer is not an input feeding device, and that adding an imaging computer to De Leo would not result in the claimed invention.

In any event, as discussed above with respect to claim 1, Appellants submit that Walach does not disclose a stream of product. Instead, Walach discloses input bins that do not constitute a stream of product. Therefore, contrary to the Examiner's assertions, Walach does not disclose providing a plurality of product from a stream of product to any of a plurality of input devices, as required by claim 15.

Furthermore, as already discussed, Appellants submit that DeWitt does not show an output bin that is common and accessible to any of a plurality of input devices. For example, in a first embodiment, DeWitt shows a single input feeding device 15 that has access to a single reject bin 250. DeWitt does not, however, disclose plural input feeding devices, and, therefore, cannot arguably disclose an output bin that is common and accessible to any of a plurality of input devices. In a second embodiment, DeWitt shows a plurality of chutes 460 and a plurality of output bins 490. However, the chutes 460 do not constitute input feeding devices. Moreover, DeWitt makes no mention of handling rejected product in the second embodiment. Furthermore, DeWitt makes no indication that elements of the first and second embodiments can be combined. Therefore, DeWitt does not disclose feeding rejected product of the plurality of product to an output bin common and accessible to any of the input devices, as recited in claim 15.

Moreover, as also discussed above with respect to claim 1, Appellants submit that Walach teaches directly away from an output bin in a single output group that is accessible to any of the plurality of input feeders. Thus, the combination of the applied references would result in separate feeding devices having access to their own reject bin, which is not a common reject bin to all of the feeding devices.

Because the applied references (i) do not teach or suggest all of the claimed features, and (ii) teach away from the claimed invention, Appellants further assert that the only reasonable rationale for modifying Walach in the manner suggested by the Examiner is found in reviewing Appellants' own disclosure, which is a use of impermissible hindsight that renders the rejection improper.

For all of the above-discussed reasons, Appellants submit that no proper combination of Walach and DeWitt teaches or suggests each and every feature of claim 15. Claims 16, 18, and 20 depend from claim 15 and are allowable for the reasons discussed above with respect to claim 15. Therefore, the rejection under 35 U.S.C. §103 of claims 15, 16, 18, and 20 should be withdrawn.

*Claim 17 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt*

The rejection of claim 17 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 17 depends from allowable independent claim 15, and additionally recites that the rejected products are fed by each input device of the plurality of input devices to the commonly accessible output bin.

Neither Walach nor DeWitt discloses this feature. Walach does not disclose a commonly accessible output bin in the second pass phase. DeWitt does not disclose a plurality of input devices that feed product to a commonly accessible output bin. Therefore, the applied references fail to disclose or suggest each and every feature of claim 17, and, therefore, fail to render the claimed invention obvious.

*Claim 19 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt*

The rejection of claim 19 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 19 depends from allowable independent claim 15, and additionally recites that the commonly accessible output bin is one of the output bins of the specific output group and the any of the input devices are all of the input device.

Neither Walach nor DeWitt discloses this feature. Walach does not disclose a reject bin. The DeWitt reject bin 250 is disposed in the image processing section 200 (FIG. 14). However, the only other bins 302a-302h are disposed in a different physical location in the stacker 300 (FIG. 18). There is no description that the reject bin 250 is part of a grouping of bins 302a-302h. To the contrary, the reject bin 250 appear to be completely unassociated with and separate from the grouping of bins 302a-302h. Therefore, the reject bin 250 does not constitute a commonly accessible output bin that is one of the output bins of the specific output group, as recited in claim 19. Therefore, the applied references fail to disclose or suggest each and every feature of claim 19, and, therefore, fail to render the claimed invention obvious.

Claims 21-23 rejected under 35 U.S.C. §103(a) in view of Walach and DeWitt

The rejection of claims 21-23 under 35 U.S.C. §103(a) is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Claim 21 recites, *inter alia*,

... means for providing a plurality of product from a stream of product;  
... means for permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means.

Appellants submit that no proper combination of the applied art teaches or suggests these features.

The Examiner asserts that Walach discloses all of the features of claim 21 except for means for permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means. The Examiner further asserts that “DeWitt discloses means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means (460 and para 105)”, that it would have been obvious to modify Walach based upon the teaching of DeWitt, and that the resultant combination contains all of the features of the claimed invention (Final Office Action, page 16). Appellants respectfully disagree.

Appellants respectfully submit that elements of claim 21 invoke 35 U.S.C. §112, sixth paragraph, and that the rejection is inappropriate because it does not address the claim in accordance with MPEP §§2181 *et seq.* Specifically, the Examiner has failed to include in the Office Action a statement that the claim limitations are being treated under 35 U.S.C. §112, sixth paragraph (MPEP §2181). More importantly, the Examiner has failed to provide an explanation

or rationale in the Office Action as to why the prior art elements are equivalents to the claimed features (MPEP §2183). Instead, the Examiner merely asserts that “[Walach] discloses means for providing a plurality of product from a stream of product” and “DeWitt discloses means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means (460 and para 105)”. These assertions do not satisfy the Examiner’s initial burden of establishing equivalence. Therefore, the rejection is improper and should be withdrawn.

In any event, Appellants submit that the identified features of Walach and DeWitt do not perform the identical functions as the claimed invention, and therefore, cannot be considered to be equivalents. Specifically, Walach does not disclose any structure, material, or act that functions to providing a plurality of product from a stream of product, as recited in claim 21. As already noted herein, Walach does not suggest a stream of product.

Additionally, DeWitt does not disclose any structure, material, or act that functions to permit, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means, as recited in claim 21. In fact, De Witt does not even disclose a second pass phase. Instead, DeWitt describes envelopes and contents of envelopes that are serially fed through a system. Because DeWitt does not disclose a second pass phase, DeWitt cannot arguably perform the claimed function of permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means.

As discussed above with respect to claim 1, Appellants submit that DeWitt does not show an output bin that is common and accessible to any of a plurality of input devices. For example, in a first embodiment, DeWitt shows a single input feeding device 15 that has access to a single

reject bin 250. DeWitt does not, however, disclose plural input feeding devices, and, therefore, cannot arguably disclose an output bin that is common and accessible to any of a plurality of input devices. In a second embodiment, DeWitt shows a plurality of chutes 460 and a plurality of output bins 490. However, the chutes 460 do not constitute input feeding devices. Moreover, DeWitt makes no mention of handling rejected product in the second embodiment. Furthermore, DeWitt makes no indication that elements of the first and second embodiments can be combined. Therefore, DeWitt cannot arguably be said to perform the identical function recited in claim 21, namely, permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means. Therefore, the rejection is improper and should be withdrawn because the Examiner has failed to establish a *prima facie* case of equivalence.

Furthermore, as also discussed above with respect to claim 1, Appellants submit that Walach teaches directly away from an output bin in a single output group that is accessible to any of the plurality of input feeders. Thus, the combination of the applied references would result in separate feeding devices having access to their own reject bin, which is not a common reject bin to all of the feeding devices.

Because the applied references (i) do not teach or suggest all of the claimed features, and (ii) teach away from the claimed invention, Appellants further assert that the only reasonable rationale for modifying Walach in the manner suggested by the Examiner is found in reviewing Appellants' own disclosure, which is a use of impermissible hindsight that renders the rejection improper.

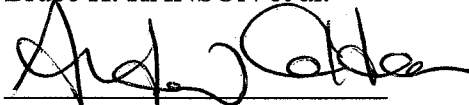
For all of the above-discussed reasons, Appellants submit that no proper combination of Walach and DeWitt teaches or suggests each and every feature of claim 21. Claims 22 and 23

depend from claim 21 and are allowable for the reasons discussed above with respect to claim 21. Therefore, the rejection under 35 U.S.C. §103 of claims 21-23 should be withdrawn.

### **Conclusion**

In view of the foregoing remarks, Appellants submit that claims 1-23 are patentably distinct from the prior art of record and are in condition for allowance. Accordingly, Appellants respectfully request that the Board reverse the Examiner's rejection of claims 1-23, and remand the application to the Examiner for withdrawal of the above-noted rejections.

Respectfully submitted,  
Bruce H. HANSON et al.

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', written over a horizontal line.

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**(VIII) CLAIMS APPENDIX**

The following is a listing of the claims involved in the appeal.

1. (original) A system for sequencing products, comprising:  
a plurality of input feeding devices each randomly receiving product from a stream of product;  
a plurality of output groups each having a plurality of output bins; and  
a control system having a mode which constrains the input feeding devices to (i) feeding non-rejected product to output bins of assigned output groups of the plurality of output groups associated with a corresponding one of the plurality of input feeding devices, and (ii) feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders.
2. (original) The system of claim 1, wherein each of the plurality of input feeding devices directs the rejected product from the stream of product to the at least one output bin in the single group based on at least one of misreading or non-reading of a code associated with the rejected product and an operator or machine error.
3. (original) The system of claim 1, wherein a number of the plurality of input feeding devices equals a number of the plurality of output groups.
4. (original) The system of claim 1, wherein the at least one output bin is a single reject output bin.
5. (original) The system of claim 4, wherein the single reject output bin increases a capacity of processing points for sequencing the product during a second pass phase in the plurality of output groups.
6. (previously presented) The system of claim 4, wherein the single reject output bin is provided in a separate output group from the assigned output groups.



7. (original) The system of claim 1, wherein the control system assigns each input feeding device to a respective one of the assigned output groups of the plurality of output group for feeding the non-rejected product during a second pass phase.

8. (original) The system of claim 7, wherein the control system constrains each input feeding device to the at least one output bin for feeding the rejected product during the second pass phase.

9. (original) The system of claim 1, wherein the control system assigns each of the assigned output groups to a designated number of routes.

10. (previously presented) The system of claim 1, wherein the plurality of input feeding devices is two input feeding devices.

11. (original) The system of claim 1, wherein the plurality of input feeding devices is four input feeding devices and the plurality of output groups is equal to a number of the plurality of input feeding devices.

12. (original) The system of claim 1, wherein the control system provides the plurality of input feeding devices access to all of the plurality of output groups during a first pass phase of sorting the products.

13. (original) The system of claim 1, wherein the plurality of input feeding devices is equal to a number of the plurality of output groups.

14. (original) The system of claim 1, wherein the product is mail pieces.

15. (original) A method of sequencing product, comprising the steps of:  
providing a plurality of product from a stream of product to any of a plurality of input devices;

feeding, in a first pass phase, each product of the plurality of product to output bins based on a code associated with each product of the plurality of product;

assigning each input device of the plurality of input devices to a specific output group of the plurality of output groups for a second pass phase;

feeding, in the second pass phase, non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each input device which is feeding the non-rejected product; and

feeding, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the input devices.

16. (original) The method of claim 15, wherein the rejected product is based on one of a misreading or non-reading of a code associated with the rejected product and an operator error.

17. (original) The method of claim 15, wherein the rejected products are fed by each input device of the plurality of input devices to the commonly accessible output bin.

18. (original) The method of claim 15, further comprising the step of determining whether the product is going through a first pass phase or a second pass phase and adjusting a control system between a first mode of operation and a second mode of operation, respectively.

19. (original) The method of claim 15, wherein the commonly accessible output bin is one of the output bins of the specific output group and the any of the input devices are all of the input devices.

20. (original) The method of claim 15, wherein the product is mail pieces.

21. (original) A system for sequencing product, comprising:

means for providing a plurality of product from a stream of product;

means for feeding each product of the plurality of product to output bins based on a code in a first pass phase and second pass phase;

means for assigning each feeding means to a specific output group of the plurality of output groups for the second pass phase;

means for constraining, in the second pass phase, non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each feeding means which is feeding the non-rejected product; and

means for permitting, in the second pass phase, rejected product of the plurality of product to an output bin common and accessible to any of the feeding means.

22. (original) The system of claim 21, wherein at least the means for constraining and the means for permitting is a control system operable in a first mode of operation and a second mode of operation.

23. (original) The system of claim 21, wherein the product is mail pieces.

**(IX) EVIDENCE APPENDIX**

This section lists evidence submitted pursuant to 37 C.F.R. §§1.130, 1.131, or 1.132, or any other evidence entered by the Examiner and relied upon by Appellant in this appeal, and provides for each piece of evidence a brief statement setting forth where in the record that evidence was entered by the Examiner. Copies of each piece of Evidence are provided as required by 37 C.F.R. §41.37(c)(1)(ix).

<b>NO.</b>	<b>EVIDENCE</b>	<b>BRIEF STATEMENT SETTING FORTH WHERE IN THE RECORD THE EVIDENCE WAS ENTERED BY THE EXAMINER</b>
1	N/A	N/A

**(X) RELATED PROCEEDINGS APPENDIX**

Pursuant to 37 C.F.R. §41.37(c)(1)(x) copies of the following decisions rendered by a court or the Board in any proceeding identified above in the Related Appeals and Interferences section.

<b>NO.</b>	<b>TYPE OF PROCEEDING</b>	<b>REFERENCE NO.</b>	<b>DATE</b>
1	N/A	N/A	N/A